

**IN THE DRAWINGS:**

Please enter new Figure 4, included in the Appendix section of this Response and Amendment.

**REMARKS**

Claims 1-26 are pending in the application. Claims 1-26 are rejected.

The above-referenced patent application has been reviewed in light of the Office Action, dated January 12, 2005, in which: the drawings are objected to pursuant to 37 C.F.R. 1.83(a); claims 2, 15, and 16 are rejected pursuant to 35 U.S.C. §112, second paragraph; claims 1, 2, 11, and 20 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Applicant's Admitted Prior Art (hereinafter "AAPA"); claims 1, 4, 7-11, 13, 21, and 24 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Jones (U.S. Patent No. 4,998,206, hereinafter "Jones"); claims 1, 3, and 10 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Valerino (U.S. Patent No. 5,805,454, hereinafter "Valerino"); claims 1, 2, 3, and 10 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Wilbert (D.E. Patent No. 10041398, hereinafter "Wilbert"); claims 11, 13, 17, and 20 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon (U.S. Patent No. 5,193,065, hereinafter "Guerindon"); claims 4 and 6 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Guerindon; claim 5 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Salvo (U.S. Patent No. 6,341,271, hereinafter "Salvo"); claims 15 and 18 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Salvo; claim 22 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Jones and further in view of Salvo; claim 12 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Miyazaki (U.S. Patent No. 6,370,447, hereinafter "Miyazaki"); claim 14 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Hertz (U.S. Patent No. 6,735,498, hereinafter "Hertz"); claims 11, 15, 16, and 21-25 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Scotti (U.S. Patent No. 6,813,540, hereinafter "Scotti"); claim 19 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Scotti; claims 5 and 9 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Scotti; claim 26 is rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Scotti.

Claims 1-3, 6, 10-11, 15-17, 20-21, 23, and 25-26 have been amended. New claims 27-31 have been added. Reconsideration of the above-referenced patent application in view of the following remarks is respectfully requested.

The Examiner has objected to the Drawings for numerous reasons. It is noted that new Figure 4 has been provided. According to the Examiner, "[The drawings] fail to show the gravity racks positioned so as not to rely on gravity as described in the specification". However, the cited passage refers to figure 2, which is a top view of a rack, illustrates a rack that may or may not be positioned such as to rely on gravity. Rack 12 of Figure 2, in one alternative embodiment, may be in a horizontal position as described in the cited passage. It is respectfully submitted that Figure 2 provides adequate illustration of the alternative embodiment and may comprise a rack "in a horizontal position or other position not relying on gravity for movement of pieces" Detailed description, page 4, paragraph 19. It is noted that the brief description of Figure 2 at paragraph [0016] has been amended in response to the Examiner's objection. It is respectfully requested that the Examiner withdraw his objection to the Drawings.

The Examiner has objected to the Drawings "because reference character '16' has been used to designate both manufacturing pieces and kanbans" However, it is respectfully submitted that adequate description has been provided by both the specification and claims to provide a proper understanding of the claimed subject matter. In accordance with 37 C.F.R. 1.83(a), "[C]onventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box)" It is respectfully submitted that object 16 in the figures may be either manufacturing pieces, kanbans, boxes or other containers. It is respectfully requested that the Examiner withdraw his objection to the drawings.

The Examiner has objected to the Drawings pursuant to 37 C.F.R. 1.83(a) for not showing every feature of the claims. Although Applicant takes the position that each of the claimed features are adequately illustrated, an additional Drawing, labeled as Figure 4, has been provided in response to the objection. It is respectfully submitted that this Figure and supporting description provided as an additional paragraph in the specification are provided in response to the objection by the Examiner, and do not introduce any new matter, and it is respectfully

requested that the Examiner withdraw his objection to the Drawings. Additionally, in accordance with 37 C.F.R. 1.83(a), it is respectfully submitted that the kanbans and manufacturing pieces of claim 2 are adequately represented by labeled box 16. A spring activated mechanical switch from claim 14 is adequately represented by box 14. The first and second type of manufacturing pieces of claim 17 are adequately represented by boxes 16. Because the drawings adequately illustrate features of the claims in accordance with 37 C.F.R. 1.83(a), it is respectfully requested that the Examiner withdraw his objection to the Drawings.

The Examiner has rejected claims 2, 15, and 16 pursuant to 35 U.S.C. §112 second paragraph. The Examiner has rejected claim 2 for being indefinite. The Examiner states that the term "kanban" is not used in accordance with its ordinary meaning, is not redefined in the specification, and, therefore, renders claim 2 indefinite. Although Applicants do not concede that claim 2 is indefinite, amendments broadening the scope of claim 2 have been made to the claim, and the amendments address the indefiniteness rejection by the Examiner. It is respectfully requested that the Examiner withdraw his rejection of claim 2.

The Examiner has also rejected claims 15 and 16 for being indefinite. Although Applicant does not concede that the rejected claims are indefinite, claims 11, 15, and 16 have been amended. It is respectfully requested that the Examiner withdraw his objection to claims 15 and 16.

The Examiner has rejected claims 1, 2, 11, and 20 pursuant to 35 U.S.C. §102(b) as being anticipated by AAPA; claims 1, 4, 7-11, 13, 21, and 24 pursuant to 35 U.S.C. §102(b) as being anticipated by Jones; claims 1, 3, and 10 pursuant to 35 U.S.C. §102(b) as being anticipated by Valerino; and claims 1, 2, 3, and 10 pursuant to 35 U.S.C. §102(b) as being anticipated by Wilbert. These rejections by the Examiner is respectfully traversed.

It is well-established that in order to establish a *prima facie* case of anticipation pursuant to §102 of the patent statute, the Examiner must provide prior art document that meets each and every element and limitation of the rejected claim. Therefore, even if a single element or limitation is not met by the submitted document, then the Examiner has not succeeded in establishing a *prima facie* case.

Applicant begins with claim 1. Claim 1, as amended, recites:

A method for automated replenishment notification for manufacturing pieces, the method comprising:

- (a) positioning one or more manufacturing pieces on a rack;
- (b) sensing a removal of one or more of the manufacturing pieces;
- (c) automatically generating and sending an electronic order to a supplier of one or more of the removed manufacturing pieces in response to (b).

Applicant respectfully submits that none of the cited references disclose each and every element of rejected claim 1, as amended, and, therefore, a *prima facie* case pursuant to 35 U.S.C. §102(b) has not been established. For example, beginning with claim 1, neither AAPA, Jones, Valerino, nor Wilbert disclose: positioning one or more manufacturing pieces on a rack, sensing a removal of one or more of the manufacturing pieces, and automatically generating and sending an electronic order to a supplier of one or more of the removed manufacturing pieces in response to the sensed removal. AAPA discloses automated inventory systems that are monitored and controlled by a user, and does not contemplate at least the limitation "automatically generating and sending an electronic order". Jones discloses replenishment of tools for a use in a workspace from storage, and does not contemplate at least the limitation of ordering. Valerino discloses detecting an empty rack of drugs and notifying an operation system that it is empty, and does not contemplate at least the limitation "automatically generating and sending an electronic order". Wilbert appears to disclose polling one or more sensors and altering a requirement signal if supplies are needed. There appears to be no contemplation of at least electronic ordering from a supplier. Applicant respectfully submits that because none of the cited art discloses each and every element of the rejected claims, and there is no mention of at least one of the features of claim 1, as amended, a *prima facie* case pursuant to 35 U.S.C. §102(b) has not been established. Thus claim 1 is in a condition for allowance. Claims 2-10 and 27-30 depend from and include all the limitations of claim 1, as amended, and are thus in a condition for allowance for at least the same reasons as discussed for claim 1.

Applicant respectfully submits that neither AAPA nor Jones disclose each and every element of rejected claim 11, as amended, and, therefore, a *prima facie* case pursuant to 35 U.S.C. §102(b) has not been established. For example, neither AAPA nor Jones disclose: a system comprising a gravity feed rack, a sensor adjacent to the gravity feed rack, the sensor

positioned to sense a presence of a manufacturing piece on the gravity feed rack, and a first processor connected with the sensor, the first processor operable to generate an electronic order in response to a signal from the sensor indicating a lack of the manufacturing piece and operable to communicate the order to a second processor. As just an example, neither AAPA nor Jones contemplate generating and/or sending an electronic order, but are directed towards inventory systems that are monitored and controlled by a user, and replenishment of tools from storage for use in a workspace, respectively. Applicant respectfully submits that because none of the cited art discloses each and every element of the rejected claims, a *prima facie* case pursuant to 35 U.S.C. §102(b) has not been established. Thus claim 11 is in a condition for allowance. Claims 12-16 and 31 depend from and includes all limitations of claim 11, as amended. Therefore, it is respectfully submitted that claims 12-16 and 31 are in a condition for allowance for at least the same reasons discussed above for claim 11.

Similarly, it is respectfully submitted that neither AAPA nor Jones recite all of the elements of independent claims 20 and 21, as amended. As just an example, neither AAPA nor Jones disclose: a system comprising a plurality of racks, a plurality of sensors adjacent to the plurality of racks, each sensor positioned to sense a presence of a manufacturing piece on a respective one of the plurality of racks, and a processor connected with the plurality of sensors, the processor operable to generate orders independently for each of the racks in response to the sensors indicating a lack of manufacturing pieces on the racks, the processor operable to communicate the orders to a supplier, as recited in claim 20. Additionally, neither AAPA nor Jones disclose: a method for automated replenishment notification for manufacturing pieces comprising positioning one or more manufacturing pieces on a rack, sensing a removal of one or more of the manufacturing pieces, automatically generating and sending an electronic order to a supplier of one or more of the removed manufacturing pieces in response to the sensing, sensing a lack of replacement of the manufacturing pieces after a time period, and electronically notifying in response to the lack of replacement, as recited in claim 21. Applicant respectfully submits that because none of the cited art recites each and every element of the rejected claims, a *prima facie* case pursuant to 35 U.S.C. §102(b) has not been established, and claims 20 and 21, as amended are in a condition for allowance. Claims 22-24 depend from and includes all limitations of claim 21, as amended. Therefore, it is respectfully submitted that claims 22-24 are

in a condition for allowance for at least the same reasons as discussed above for claim 21, as amended.

The Examiner has rejected claims 11, 13, 17, and 20 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon; claims 4 and 6 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Guerindon; claim 5 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Salvo; claims 15 and 18 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Salvo; claim 22 pursuant to 35 U.S.C. §103(a) as being unpatentable over Jones and further in view of Salvo; claim 12 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Miyazaki; claim 14 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Hertz; claims 11, 15, 16, and 21-25 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Scotti; claim 19 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Guerindon and further in view of Scotti; claims 5 and 9 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert and further in view of Scotti; and claim 26 pursuant to 35 U.S.C. §103(a) as being unpatentable over Wilbert in view of Scotti.

It is well-established that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, a suggestion or motivation must be shown, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify a prior art reference or combine two or more prior art references. Second, a reasonable expectation of success in making this combination or modification must be shown. Third, it must be shown that the combination or modification, if proper, contains all of the elements of the application under examination. If any of these elements are not met, a successful *prima facie* case of obviousness has not been established. It is respectfully submitted that none of the cited art, whether viewed alone or in combination, contains all of the elements of the rejected claims.

Applicant begins with claim 4. Neither Wilbert nor Guerindon appear to disclose: positioning one or more manufacturing pieces on a rack, sensing a removal with a mechanical switch of one or more of the manufacturing pieces, and automatically generating and sending an electronic order to a supplier of one or more of the removed manufacturing pieces in response to the sensed removal. As mentioned previously, Wilbert appears to be directed towards polling

one or more sensors, and altering a requirement signal if supplies are needed. There appears to be no contemplation of at least electronic ordering from a supplier in Wilbert. Guerindon appears to be directed towards providing a depletion signal so that material may be adequately distributed, and does not appear to provide the elements of claim 4 lacking in Wilbert. It is respectfully submitted, therefore, that at least one element of claim 4 is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie* case of obviousness pursuant to §103(a) of the patent statute has not been made. It is, therefore, respectfully submitted that claim 4 is in condition for allowance. Claims 5 and 6 distinguish from the cited art at least on the same basis, and are therefore also in a condition for allowance.

Referring to claim 11, neither Wilbert, Guerindon, Hertz, nor Scotti appear to disclose: a system comprising a gravity feed rack, a sensor adjacent to the gravity feed rack, the sensor positioned to sense a presence of a manufacturing piece on the gravity feed rack, and a first processor connected with the sensor, the first processor operable to generate an electronic order in response to a signal from the sensor indicating a lack of the manufacturing piece and operable to communicate the order to a second processor. As mentioned previously, Wilbert and Guerindon are directed towards polling one or more sensors, and altering a requirement signal if supplies are needed, and providing a depletion signal so that material may be adequately distributed, respectively. Hertz and Scotti appear to be directed toward replenishment indicators, and do not appear to contemplate electronic ordering from a supplier. It is respectfully submitted, therefore, that at least one element of claim 11, as amended, is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie* case of obviousness pursuant to §103(a) of the patent statute has not been made. It is, therefore, respectfully submitted that claim 11, as amended, is in condition for allowance. Claims 12-16 and 31 distinguish from the cited art at least on the same basis, and are therefore also in a condition for allowance.

Referring to claim 17, neither Wilbert nor Guerindon appear to disclose: a method for automated replenishment notification for manufacturing pieces comprising positioning a first type of manufacturing piece on a first rack, positioning a second type of manufacturing piece on



a second rack, automatic sensing for removal of manufacturing pieces from the first and second racks, electronically communicating a first order to a supplier for the first type of manufacturing pieces where removal of the first type of manufacturing pieces is sensed, and electronically communicating a second order to a supplier for the second type of manufacturing pieces where removal of the second type of manufacturing pieces is sensed, wherein the first order is independent of removal of the second type of manufacturing pieces and the second order is independent of removal of the first type of manufacturing pieces. As mentioned previously, Wilbert and Guerindon are directed towards polling one or more sensors, and altering a requirement signal if supplies are needed, and providing a depletion signal so that material may be adequately distributed, respectively. It is respectfully submitted, therefore, that at least one element of claim 17, as amended, is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie* case of obviousness pursuant to §103(a) of the patent statute has not been made. It is, therefore, respectfully submitted that claim 17, as amended, is in condition for allowance. Claims 18 and 19 distinguish from the cited art at least on the same basis, and are therefore also in a condition for allowance.

Referring to claim 20, neither Wilbert nor Guerindon appear to disclose: a system for automated replenishment notification for manufacturing pieces, comprising a plurality of racks, a plurality of sensors adjacent to the plurality of racks, each sensor positioned to sense a presence of a manufacturing piece on a respective one of the plurality of racks, and a processor connected with the plurality of sensors, the processor operable to generate orders independently for each of the racks in response to the sensors indicating a lack of manufacturing pieces on the racks, the processor operable to communicate the orders to a supplier. As mentioned previously, Wilbert and Guerindon are directed towards polling one or more sensors, and altering a requirement signal if supplies are needed, and providing a depletion signal so that material may be adequately distributed, respectively. Applicant additionally relies on arguments presented with reference to the §102(b) rejections of claim 20, above. It is respectfully submitted, therefore, that at least one element of claim 20, as amended, is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie*

case of obviousness pursuant to §103(a) of the patent statute has not been made. It is, therefore, respectfully submitted that claim 20, as amended, is in condition for allowance.

Referring to claims 21-24, neither Wilbert, Scotti, Jones nor Salvo appear to disclose: a method for automated replenishment notification for manufacturing pieces, comprising positioning one or more manufacturing pieces on a rack, sensing a removal of one or more of the manufacturing pieces, automatically generating and sending an electronic order to a supplier of one or more of the removed manufacturing pieces in response to the sensing, sensing a lack of replacement of the manufacturing pieces after a time period, and electronically notifying in response to the lack of replacement. As mentioned previously, Wilbert is directed towards polling one or more sensors, and altering a requirement signal if supplies are needed. Scotti appears to be directed toward replenishment indicators, and does not appear to contemplate electronic ordering from a supplier. Jones appears to be directed toward replenishment of tools from storage for use in a workspace. Salvo appears to be directed toward historical analysis and market analysis of products. Applicant additionally relies on arguments presented with reference to the §102(b) rejections of claim 21, above. It is respectfully submitted, therefore, that at least one element of claim 21, as amended, is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie* case of obviousness pursuant to §103(a) of the patent statute has not been made. It is, therefore, respectfully submitted that claim 21, as amended, is in condition for allowance. Claims 22-24 distinguish from the cited art at least on the same basis, and are therefore also in a condition for allowance.

Referring to claims 25-26, neither Wilbert nor Scotti appear to disclose: a system for automated replenishment notification for manufacturing pieces, comprising a rack, a sensor adjacent to the rack, the sensor positioned to sense a presence of a manufacturing piece on the rack, and a processor connected with the sensor, the processor operable to generate an electronic order in response to a signal from the sensor indicating a lack of the manufacturing piece, operable to communicate the electronic order to another processor, operable to sense a lack of replacement of the manufacturing piece after a time period in response to the sensor and operable to generate a notification in response to the lack of replacement. Applicant additionally relies on arguments presented with reference to the §103(a) rejections of similar claims, above. It is

respectfully submitted, therefore, that at least one element of claims 25 and 26, as amended, is absent from the cited art, and any alleged combination would still not result in a combination having each element of the rejected claim. Therefore, at least one prong of the three-prong test for obviousness has not been satisfied, and a *prima facie* case of obviousness pursuant to §103 of the patent statute has not been made. It is, therefore, respectfully submitted that claims 25 and 26, as amended, are in condition for allowance.

For at least the reasons presented above, it is respectfully requested that the Examiner withdraw his rejections of claims 4-6, 9, and 11-26 pursuant to 35 U.S.C. §103(a).

Applicants have added new claims 27-31. It is respectfully submitted that there is adequate support in the specification for the new claims, and that the new claims do not introduce any new matter. Additionally, it is respectfully submitted that new dependent claims 27-31 are patentable for reasons similar to those presented in support of amended independent base claims 1 and 11.

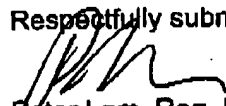
**CONCLUSION**

In view of the foregoing, it is respectfully submitted that all of the claims pending in this patent application, as amended, are in condition for allowance. If the Examiner has any questions, he is invited to contact the undersigned at (650) 943-7350. Reconsideration of this patent application and early allowance of all the claims is respectfully requested.

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